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Mammillaria caerulea Craig

The incomplete description of this species was published in the "Mammillaria Handbook" on page 306 in the Unclassified Section because the flower data was not known at that time. It has since flowered and description is presented herewith:

FLOWER (April), funnelform, 15 mm. long, 12 mm. wide. Outer perianth segments linear-lanceolate, tip acuminate, margins serrate, light pinkish tan tapering mid stripe, white to very pale pink margins. Inner perianth segments lanceolate, tip acute, margins entire, white to pale cream margins, pale pink mid line. Filaments pale pink above to nearly white below. Anthers pale dirty yellow. Style cream below, very pale pink at top. Stigma lobes 2-3, less than 1 mm. long, pale yellow.

BOOK NEWS

Abbey Garden Press is glad to announce the forthcoming books which will soon be available, not at collectors' high prices, but at current prices. Most of these books are being distributed in the U. S. A. exclusively by this Press. Some editions are being published jointly in England and this cooperative plan makes the reprinting possible. We are also happy to announce, in this list, some of the most popular books that have been needed for many years.

CACTI, Revised edition with additions by the late Prof. J. Borg.

BULLETIN OF CACTUS RESEARCH, 460 pages and 250 photos, by Curt Backeberg.

SUCCULENT PLANTS, revised edition of the 300 page book by H. Jacobsen, translated by Vera Higgins.

THE CACTACEAE, 1939-1944, by Curt Backeberg.

MONSTROSITY AND CRISTATION IN SUCCULENT PLANTS, J. J. Verbeek Wolthuys.

DISTRIBUTION OF CACTI, by Curt Backeberg.

THE GENUS LITHOPS

HANDBOOK ON HAWORTHIA AND ALLIED GENERA.

Other books are in production. Mail a post card to Scott E. Haselton, Box 101, Pasadena, Calif., ordering the books you want and we will advise you the price before shipping. You pay only the list price on these items.

FREE REPRINT

W. Taylor Marshall has kindly consented to mail a free copy of his cactus section that appeared in the April issue of The National Horticultural Magazine. The title of the reprint is "Epiphyllums, Phyllocacti and Orchid Cacti." As long as the supply lasts these are available to Society members providing they enclose a self-addressed, stamped envelope. Address: W. Taylor Marshall, Associate Editor, 327 N. Ave. 61, Los Angeles, Calif.

ANNOUNCING

The Cactus and Succulent Society of Great Britain is continuing the publication of The Cactus Journal with Vol. 8, No. 3. The first issue was dated July, 1946, and is available at \$2.50 per year for the four issues (published quarterly). Subscriptions may be sent direct to the Editor, Hon. E. Shurly, Esq., 7 Deacons Hill Road, Elstree, Herts, England, or to Scott E. Haselton, Box 101, Pasadena, Calif.

T. Harper Goodspeed, Plant Hunters in the Andes. A good account and excellent photographs of cactifound in the Andes. \$5.00. Postage 15c, Foreign 30c.

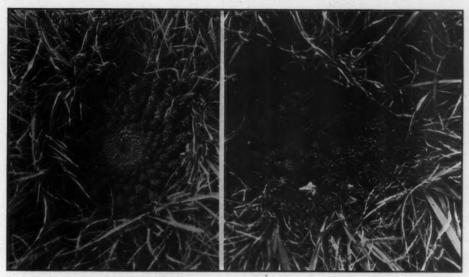


Fig. 72-A. Euphorbia gathergensis N. E. Br. growing in the grassveld of Griqualand East, C. P. Plants usually with single crown 4 in. in diameter; occasionally the ma in stem rebranches and produces several crowns 6 in. in diameter. B. On the right is the type found growing 6 miles south of Kokstad.

Euphorbia Notes

By R. A. DYER

A botanical survey trip was made in January of this year through the grasslands (grassveld) of Natal, the eastern Cape Province and eastern O.F.S. There was no idea of studying Euphorbia species and it was hardly expected that many would be seen. The itinerary of the trip was particularly interesting in that it included the road of highest altitude in South Africa,—the one passing over the great Drakensberg range of mountains at Naude's Nek, 8,250 feet altitude. This is between Maclear and Rhodes, skirting the southern boundary of Basutoland where some of the peaks of the mountains rise over 10,000 feet.

It was not surprising to find plants identifiable with *E. gatbergensis* above Kokstad at nearly 5,000 ft. alt. since this record was made tentatively in the Succulent Euphorbieae (1941) on page 319. Habit photographs were taken including an abnormal plant with several heads (Figs. 72A and B). For brevity's sake, since most if not all readers will possess a copy of the Succulent Euphorbieae, descriptive notes on the

species mentioned here will not be included.

E. gatbergensis turned up again at Naude's Nek, but it is regretted to have to say, that the effort of pushing our grand eight cylinder Delux model motor-car up the mountain through mud and rain had temporarily dampened our photographic ardour and the weather was really inclement. E. gatbergensis was quite healthy with an abundance of seedlings in this situation, with an average rainfall of about 45 in. per annum (about 112 cm.) and snow an annual occurrence.

Descending the western slope of the mountain a hundred feet or so, Euphorbia clavarioides was found. Other fine specimens of the same species were photographed another couple of hundred feet lower on the slope (Fig. 73) where the rainfall varies between 25-35 in. per annum and the humidity is rarely high for long periods. With the prior knowledge that this species occurs in Basutoland, the records were not as surprising as they might have been otherwise. Both on the mountain pass and on the western



Fig. 73. Euphorbia clavarioides in fruit at Barkly East, several miles from Naude's Nek on the road to Rhodes.

slopes several other succulents, belonging to the genus *Crassula* and the group *Mesembryae*, were recorded.

But to run across Euphorbia mauritanica not far distant at 6,000 ft. was a distinct surprise. A photograph was taken at that site, with the survey officers making a careful study of the badly treated veld, and trying to explain the presence of E. mauritanica and other karoo types apparently rather far from home (Fig. 74).

By far the most interesting single site though, from the succulent plant aspect, was a small rocky hill (koppie) near Tsolo in the eastern Cape Province between Maclear and Umtata. Here at about 3,300 ft. alt. and with an annual rainfall of about 20 in., grassveld is dominant, but on the koppie beautiful large cushions of Euphorbia pulvinata were most conspicuous, with Anacampseros sp. Crassula sp. Stapelia sp. etc., dispersed about. Actually, however, it was Encephalartos cycadifolius which attracted attention from a distance. It is shown in association with E. pulvinata in Fig. 75 and perhaps readers would like to discuss, whether or not they would include those fascinating primitive plants, the 'Cycads,' as succulents.



Fig. 74. Euphorbia mauritanica L. about 20 miles southwest of Barkly East at about 6000 feet. Plants are occasionally 1½-2 feet tall. The veld shows evidence of the transitional stage between the karoo and the temperate mountain types.



Fig. 75. Cycads growing in association with mounds of Euphorbia pulvinata, and species of Anacampseros, Crassula, and Stapelia.



Fig. 76. View of the mountain ranges and winding road photographed by author two hundred feet below Naude's Nek on the west slope, at the habitat of Euphorbia clavarioides.

EDITORIAL

Because of the increased membership we are able to furnish our readers with two interesting and valuable reprints. As fast as paper is available we will include in the center section, which may be removed and assembled separately, installments of the "Baltimore Cactus Journal" and black and white reproductions of "Blühende Kakteen." These reprints should please both the scientific-minded and the amateur.

FOR THE AMATEUR

The "Baltimore Cactus Journal" was published by The Baltimore Cactus Society of Baltimore, Maryland. Only two volumes were published because it did not "receive the support which it was promised when the project of publishing a paper in the interest of cactaceous plants was first announced." The magazine appeared between July, 1894, and April, 1896, and the subscription price was 50c per year. The Journal contained early explorations with names that made cactus history. Early dealers and growers supplied articles on culture and propagation. The questions and answers show that they experienced the same difficulties and successes that we grieve and enjoy today. The Journal is rare, indeed, with perhaps less than six volumes in existence; probably that is why only two or three of our members have ever had the pleasure of scanning this interesting work that rode in on the wave of a short-lived fad.

FOR THE SCIENTIFIC MINDED

This issue of the Cactus Journal contains the first two plates of "Blühende Kakteen" (Cacti in Flower), also known in Latin as: "Iconographia Cactacearum." This work was founded by the eminent cactologist Karl Schumann in 1900 and edited by him from 1900 to 1903 (plates 1 to 12); Max Gürke edited it from 1904 to 1910 (plates 13 to 124); from 1911 to its conclusion in 1921 (plates 125 to 180) F. Vaupel was the editor. This work was issued serially in four plates per issue under the auspices of the Deutsche Kakteen-Gesellschaft (German Cactus Society). Our black and white reproductions are from the lithographed plates which were hand colored. Each plate was accompanied by a page of text in German; our translations were made by Edwin P. Gueguen. W. Taylor Marshall has supplied the notes giving us the present-day classification.

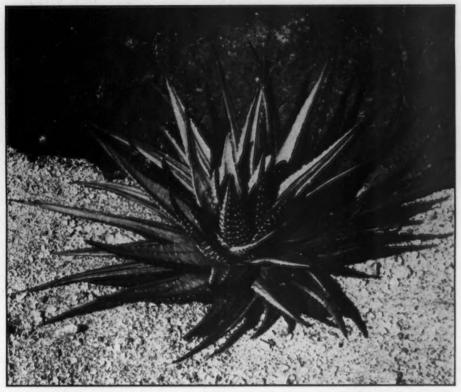


Fig. 77
A variegated form of Haworthia subattenuata (Salm) Bak. nat. size,

Notes on Haworthias

By J. R. BROWN

A distinctly variegated plant of the genus *Haworthia* was considered quite a rarity until recent years, when plants of a well marked variegated form were obtained from Germany by Mr. E. C. Hummel of Inglewood, California. This Haworthia is a variegated form of *Haworthia subattenuata* (Salm) Bak. and is now widely distributed in this country, being grown in great numbers by dealers in succulent plants as a novelty.

This variegated form differs nowise from the

type except for the yellow markings, which may occur as narrow or broad lengthwise lines, or entire leaves and occasionally an entire plant may lack any green color; the size, shape of leaf, tubercles, inflorescence and flowers are identical. The flowering period is also the same, June-August in Southern California.

The plant shown in the illustration of this Haworthia is an example of an averagely marked specimen.



Fig. 78

The annual exhibit of Cactus Pete in the Broadway Department Store, Los Angeles.

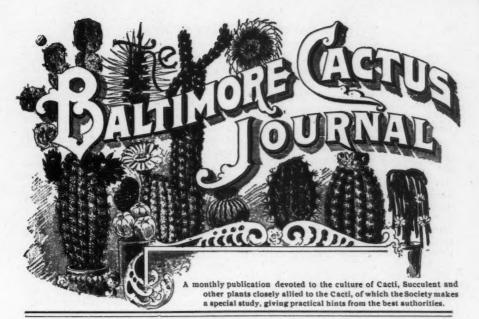
—CACTUS PETE'S HYBRIDS—The following list is a check-list of names given to the originations of Orchid Cacti by Cactus Pete. If anyone has precedence to any of these names, please send date, place of publication, and the originator of the name to Cactus Pete, 5440 Valle, Blvd., Los Angeles 32, Calif.

RELEASED IN 1946—	Jezebel	Sitka	Diana
April Shower	Kathryn Ruth	Sun Glow	Don Juan
Bali	Klondike	Rose Luster	Esquire
Blackie	Lost Weekend	Royal Velvet	Hades
Bright Eyes	Luana	Tangerine	Glacier
Candle Lite	Lucifer	Temptation	Goblin
Carol Lynn	Mellow Glow	Topsy	Miss Verity
Cascade 1-	Midnight	Trader Horn	Nugget
Crown of Gold	Ming Gold	White Goddess	Persia
Crystaline	Miss Hollywood	Winged Lotus	Pigmy
Day Break	Misty Isle	Winsome	Pixie
Dorado	Monarch	INTRODUCED BUT	Purity
Emblem	Muriel	NOT RELEASED IN	Pluma d'or
Fatima	Myrna	1946—	Sable
Feathers	Nada	Ace Hi	Sky Lark
Flame	Niagara	Black Magic	Storm King
Flirtation	Painted Lady	Cameo	Small Fry
Gabriel's Horn	Peace	Challenge	Snow Flurry
Gilded Feathers	Phantom	Cherub	Snow Princess
Golden Glow	Ruby Cup	Comet	Spit Fire
Harlem	Sable	Daffodil	Temple Gold

Since precedence has been claimed and because of the many plants already distributed by us, we wish to change the following names: Amethyst—CP/44 to Amethystine; Inferno—CP/40 to Pete's Inferno; Jewel—CP/44 to Gem; Minuet—CP/45 to Tiny.—Adv.

Curt Backeberg and F. M. Knuth. Kaktus—A B C. Copenhagen, 1935. 432 pages of technical descriptions and illustrations of cacti. Written in Danish. This rare book has just been received from Denmark. While available at \$8.75, postage U.S.A. 10c, foreign 30c.

The Flowering Plants of South Africa. A complete set of 23 volumes of hand-colored plates with descriptions of flowering plants indigenous to South Africa. Includes many plates of Aloes, Haworthias, Ceropegias, Mesembs., bulbous and other plants. Beautifully bound set now available for \$400.00.



VOL. I.

JULY, 1894.

No. T.

THE CACTUS.

This class of plants recommends itself to the amateur more highly than any other we know of. Needing but ordinary care, it can be left for days and even weeks without water during the dormant season, and it will withstand all the heat and dust of the ordinary dwelting. To the busy housewife it offers a pleasing contrast to many varieties of flowers that need most careful and constant care to produce good results.

Many of the species are very interesting both in the manner of growth and in the great beauty and size of flower.

In the large and varied family of cacti, there is much to interest and instruct the most casual observer; while to the enthusiast, the desire to increase his collection of plants becomes almost a mania.

Of late years quite a large number of flower lovers have added these curious plants to their collections.

In many parts of Germany and England these plants have been collected and grown for years. The treatment they received however produced such poor results, that they did not grow in public favor as rapidly as their beauty and grotesqueness entitled them to. Under more favorable treatment, the growth of the plants, the beauty and number of blooms to be obtained from some varieties brought them into much greater prominence, and we confidently look forward to the day when at least a small collection will be owned

by all admirers of the beautiful in flowers.

Of the many hundreds of varieties now known, the greater portion are natives of the United States and Mexico, and of these many grow in such remote parts, that they are very difficult to obtain, and are consequently quite rare.

consequently quite rare.

Visitors to the World's Fair were much pleased with the exhibit of cacti from Mexico, as also the splendid collection from Arizona and Texas, which includes some of the Candelabra Cacti, familiar to travelers in the more distant parts of our country.

No doubt many of the visitors saw then a collection of cacti for the first time in their lives, and who can tell the desires that may have taken possession of perhaps thousands who desire to possess a few of these wonderful plants.

Of the great multitude of plants under cultivation, the cactus occupies a sphere peculiarly its own, and while the plant in some instances is grotesque, and we may say often ugly, nature seems to make amends by giving it some of the most beautiful and fragrant flowers, many of them surpassed by none, save probably the bloom of an orchid.

Orchids—Some of these plants are becoming popular among amateur florists who have facilities for their culture. A few practical notes from any of our readers regarding their success with Orchids, the kinds, treatment, &c., would be interesting. The Society are having a series of lectures delivered by one of the members at the regular meetings. We propose quoting from them for the benefit of our readers.

The following extracts are from one delivered at a recent meeting:

CULTURE OF CACTI.

BY studying the conditions and surroundings of plants found growing in a natural state, we gain a clue to their better management when grown under conditions, that to a great extent are artificial.

The poor success in growing cacti in many instances, is no doubt due to the lack of proper knowledge as to their surroundings, etc., before bringing them to

our homes.

This beautiful class of plants in their native homes, grow mostly in sandy or loamy soil, and in hot arid regions, where we find scarcely any other vegetation.

Only a few species are found in marshy soil, viz: Mamillaria Versicolor, Mamillaria Centricirrha and Anhalonium Pris-

A small portion of the family vegetate

like parasites on trees.

The greatest portion however grows in very hot and sandy sections, which would indicate that heat and drought are essen tial to the best success in growing them.

The cacti family is so accommodating that it will live in almost any soil, (provided it is free from raw animal substance) yet to obtain bloom and achieve the best results, it is necessary to appy soils that have been found to be the best adapted for the different varieties.

SOILS.

a. 3 parts peat soil, 1 part clean hot bed soil, 1 part sand and 1 part powdered charcoal.

This has proved the most successful for all the parasites of the cacti family, the less fleshier varieties of mamillaria, echinocactus, cereus, anhalonium. astrophytum and pelecyhora, and all seedlings that are ready to handle.

b. 3 parts good hotbed soil, 1 part of loam, 1 part coarse river sand, 1 part of

peat or rotted wood.

This soil is best adapted for the stout or thick growing varities, such as melocactus, echinopsis, opuntias and pilocereus; also the older plants of mamillaria, echinocactus and cereus family.

c. I part leaf mold, I part hotbed soil, I part well-rotted sod, and ½ part coarse river sand.

This soil most suitable for sowing seed and for seedlings, as it keeps open and porous, allowing full evaporation, and preventing the seedling from smothering.

Peat is beneficial to all varieties of cacti as it is light and rich, keeps the soil in a good porous condition, dries out quickly and is free from rotten and decaying sub-

stances.

Charcoal can be used to advantage in all mixtures of soil. Wood charcoal as well as animal charcoal possess many beneficial qualities which recommend them, and should be used freely. It will aid vegetation and has great absorbing powers; it will add warmth to the plants and will keep the soil in a sweet condition.

Animal charcoal, with which sugar is refined, is perhaps the best, as it possesses

the most nutriment.

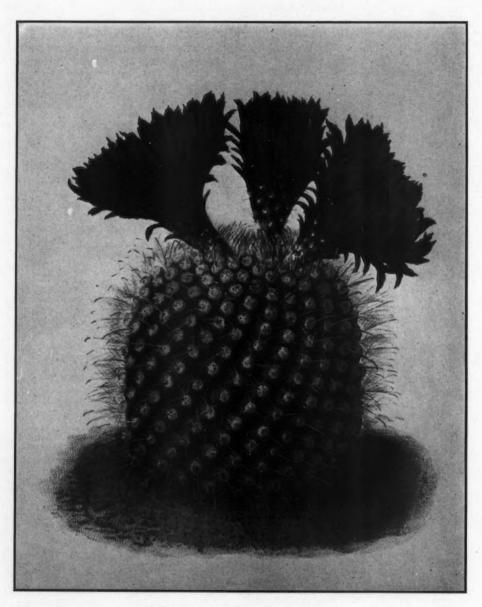
The use of these soils, with a good sunny exposure and care as to watering, will undoubtedly produce good results.

ORCHIDS.

AN Orchid, as commonly known, is a flower belonging to the great Natural Order Orchidaceæ. Plants of this order are found native in all parts of the world, except in exceedingly cold regions and in the hot, arid countries of the tropics. Inthe temperate zones the plants are terrestrial, that is, they are found growing in the earth. In the dense forests of the Torrid Zone, where the finest and rarest specimens are found, they are mostly Epiphytes, or found growing on trees. The plants are all perennials, with paralleled veined leaves, and the flowers are irregular, and so diverse in form that they have been likened to almost all kinds of

One of the distinguishing characteristics of this order is the twisting of the ovary. If you find a herbaceous plant with fleshy or fasciculated roots, parallel. veined leaves, irregular or papilionaceous. flowers borne upon a twisted ovary or seedpod you can determine at once that the plant is an Orchid. Of course these are not absolute characteristics of the order, but there are few of our native Orchids that could not be readily distinguished by this simple description. The finest native Orchid we have in this country is-Cypripedium spectabilis, the well-known Lady Slipper. It is easily grown in the garden. Most of the Orchids grown are from tropical countries and require the heat of the hot house. The Epiphytical

BLÜHENDE KAKTEEN



Echinocactus microspermus Weber

Plate 1.

From Blühende Kakteen-October 16, 1900.

Echinocactus microspermus Weber

Echinocactus microspermus Weber in Bois, Dictionnaire d'horticulture 469; K. Schumann in Monatsschrift für Kakteenkunde VII. 104; K. Schumann, Gesamtbeschreibung der Kakteen 398.

The species of the genus Echinocactus here illustrated is one of the most remarkable of the entire genus in many respects. Even a glance at its outer appearance will show us that it belongs in that section of South American species which I have set up as the subgenus Notocactus. This may be divided into two groups. In the first group the ribs are clearly seen, even though they are sometimes broken up into pronounced tubercles, while in the second the ribs are no longer visible, at least in age, the tubercles being spirally arranged in two ranks like those of the Mammillarias. Each of these groups is composed of a great number of species from separate localities: the first, to which belongs Echinocactus concinnus Monv., E. scopa Lk, et Otto, E. Leninghausii K. Sch., chiefly inhabits the eastern part of South America, while the second group is found in the regions of the Andes both on the east and west sides of the slopes.

Our species falls into this last group. We owe its introduction to the indefatigable efforts of Dr. Weber in Paris, honorary member of the German Cactus Society. Through his kindness I came into possession of the plant, which is a great rarity in Germany. It comes from the state of Catamarca in Argentina, and is without doubt one of the finest species under cultivation at present, commanding the attention of all by its leaf-green color and beautiful whitish spines becoming yellowish towards the tips of the stronger spines. One of the spines is hooked, a character peculiar to this species; it is not duplicated in any other of the genus in South America.

We have cultivated the plant since 1896 with the best results. The plant makes no demands for special treatment; it grows vigorously and blooms each summer with numerous, large, golden-yellow flowers. Seeds are abundantly produced with artificial pollination, but the number which germinate is rather moderate, a condition probably due to the too near relationship of the flowers. Thus, in spite of all care, we have had no real success in the cultivation of seedlings, and thereby lies the reason for its scarcity in German collections.

CLASSIFICATION—1946 Notes by W. Taylor Marshall

Sub-tribe 4. Echinocactanae

Genus 97. Parodia

Parodia microsperma (Weber) Spegazzini

Echinocactus microspermus Weber, Dict. Hort. Bois 469. 1896. Hickenia microsperma Britton and Rose, Cactaceae III:207. 1922. Parodia microsperma Spegazzini, Brev. Nat. Cat. 1923.

Schumann included this species in his sub-genus *Notocactus* but Britton and Rose, noting that the fruit and seeds differed from those common to the Notocacti assigned it to their monotypic genus *Hickenia*. Spegazzini concurred in this separation but called attention to the prior use of *Hickenia* as a genus by Lillo and proposed the name *Parodia* to replace Britton and Rose's preoccupied name. Recent explorations have uncovered numerous other species with similar fruit and seed all of which have been assigned to *Parodia* so that the genus now includes 22 or more species.

PLATE 2.

Echinopsis cinnabarina Labouret

Echinopsis cinnabarina Labouret, Monographie des Cactées 288; Weber in Bois, Dictionnaire d'horticulture 471; K. Schumann, Gesamtbeschreibung 288. Echinocactus cinnabarinus Hooker in Botanical Magazine. Plate 4326.

This beautiful plant was sent to Kew Gardens in 1846 by Bridges, where it bloomed after a short time, and was then described and well illustrated by Hooker in the well-known Botanical Magazine. The author did not place the plant in the genus *Echinopsis*, where it is held today, but in the genus *Echinocactus*. It forms a small natural group at present in the former genus along with the widely cultivated, easily propagated and free-flowering *Echinopsis Pentlandii* S.-D. and *E. obrepanda* K. Sch., the latter better known under the names *E. Misleyi* Lab., or *E. cristata* S.-D. It is characterized by the hatchet-shaped tubercles comprising the ribs.

If the flowers alone are considered, Hooker's opinion that the species be held in the genus *Echinocactus* is more readily perceived. The short funnel-form shape of the perianth, which it shares with *E. Pentlandii* S.-D., is indeed duplicated in many species of *Echinocactus*, so that it might seem to be characteristic of this genus. Nevertheless I have never been of the opinion that it should be returned to *Echinocactus*. The basis for retaining it in *Echinopsis* lies in the shape of the body, which corresponds perfectly with that of *Echinopsis* obrepanda K. Sch., and there can be no doubt that this is a true *Echinopsis* in its flower characteristics. The position of our plant thus will be better decided by whether the characters of the flower or those of the body are considered. In *E. cinnabarina* and *E. Pentlandii* S.-D. we have before us two species which in my work on the distribution of the cacti, I have signified as merging forms. They obviously show connecting links between the genera, by which they could rightfully be classified in either genus.

Our beautiful plate clearly shows that the name *E. cinnabarina* is not well chosen, since the flower color to which the species name alludes, is by no means cinnabar-red, but carmine.

CLASSIFICATION—1946 Notes by W. Taylor Marshall

Sub-tribe 3. Echinocereanae

Genus 68. Lobivia

Lobivia cinnabarina (Hooker) Britton and Rose

Echinocactus cinnabarinus Hooker in Curtis's Bot. Mag. 73: pl. 4326. 1847. Echinocactus cinnabarinus spinosior Salm-Dyck, Cact. Hort. Dyck. 1849. 35, 176. 1850. Echinopsis cinnabarina Labouret, Monogr. Cact. 288. 1853. Echinopsis chereauniana Schlumberger, Rev. Hort. IV. 5, 402. 1856. Echinopsis cinnabarina spinosior Rümpler in Förster, Handb. Cact. ed. 2. 618. 1885. Echinocereus cinnabarinus Schumann in Engler and Prantl, Pflanzenfam. 3*a:185. 1894. Lobivia cinnabarina Britton and Rose, Cactaceae III:54. 1922.

Under our modern classification the day-flowering species of Schumann's *Echinopsis* which bear short, colored flowers are considered Lobivias, while the much longer, nocturnal species with white to magenta flowers remain in *Echinopsis*.

Orchids are mostly tied to blocks, a little sphagnum moss tied over the roots, and the block hung up in the hot house. Some Orchids produce their flower-clusters from the "roots," and when grown in baskets of moss the flowers are likely to be produced from a stem issuing from the bottom, as from the top of the vessel. Many Orchids are very difficult to grow, and can only be successfully cultivated by the most careful florist and with the most approved facilities known.

Charcoal for Rooting Cuttings.

THE following method has proven itself very successful in the rooting of cacti cuttings:

Fill a flat box of say about 8 inches depth with 2 inches of coarse coal ashes, cover the same with about 4 inches of crushed charcoal, and moisten the whole thoroughly, after which put in the slips or cuttings you wish to root. Set the globular varieties on the surface of the charcoal, and sink the taller ones into it securely fastened to a stake, to prevent them from falling when watering. Now set the box in a light, shady position in your greenhouse or conservatory, or when outside protect it by means of glass from the heavy rains, but do not exclude light, and in a reasonably short time new roots will make their appearance. Keep the charcoal moderately moist continually, and occasionally spray the plants with an atomizer or small syringe, which is very beneficial. Do not be hasty in planting your cutting out as soon as young roots show themselves, but always allow them to make a bunch of good, healthy roots, and your patience will be rewarded by better growth, after becoming thoroughly established.

This error in hasty planting before being thoroughly rooted is often the cause of the plant showing no growth for a long period, because there was not enough time allowed for roots to form to properly nourish the plant. When planting out, carefully take the plant out of the cutting box, so you do not injure the roots, and as they are very tender, pack the soil prepared for them carefully around, and water slightly.

This method will also prove very satisfactory with euphorbias, aloes, agaves, etc., and also many leaf plants.

It is certainly worthy of a trial, as it costs comparatively nothing, and we feel confident that better results will follow than from the use of sand, for several reasons, viz: In the use of sand, cuttings must be allowed to dry off before setting them in the cutting-box,

which of course causes them to shrivel to a certain extent. With the use of charcoal it can be placed at once, as the charcoal contains healing properties, and no danger is experienced from the rotting of healthy cuttings as is often the case when sand is used. Another important point is, that charcoal, while it holds moisture as long as sand, does not not bake nor become impure.

WINTER-BLOOMING PLANTS.

Those who wish to raise plants for winterblooming should begin this month. Seeds of Chinese Primrose, Cineraria, Ageratum, Browallia, Mignonette and many other plants should be sown this month, in order to bloom well during the coming winter. For baskets sow Lobelia, Mimulus, Smilax, Linaria, etc., and the display will be fine by the time you want to decorate your rooms for winter. Now is the time, also, to start cuttings for winter. Geraniums Fuchsias, Begonias, etc., all start readily in sand during the warm months, and make a vigorous growth which ensures fine flowers for winter.

WATERING PLANTS.

As a rule, the best time to water plants is in the evening. They thus have the benefit of the moisture during the night, and are better prepared for the evaporation which occurs during the day time.

Never water plants at mid-day, especially when the sun is shining upon them. Before the moisture is evaporated from the foliage the heated rays are likely to cause blighted or withered spots to appear upon the leaves, something for which there is no remedy except to remove the leaves and allow new and perfect ones to take their places.

POT-BOUND PLANTS AND BLOOMING.

Begonias and most of our blooming plants need not be pot-bound to bloom, but as a matter of fact they rarely bloom till the roots have reached the sides of the pot. While a plant is pushing out roots and growing it rarely blooms; but after the growth has been made, then comes the buds and flowers. Of course this is not an absolute rule, for many of our deciduous trees and shrubs, as well as herbaceous perennials bloom before active growth begins. These, however, form their buds and perfect their growth the previous season. To pot or trans-plant always retards blcoming.

The Baltimore Cactus Journal,

PUBLISHED BY

THE BALTIMORE CACTUS SOCIETY,

A. M. Cordray,

Editor.

Office, 1200 Edmonson Ave., Baltimore.

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Baltimore, July, 1894.

THE "BALTIMORE CACTUS SOCIETY" was formed in 1889 by several gentlemen engaged in the collecting and cultivating of rare cacti.

Upon application to our State Legislature a charter was granted, and the Society was duly incorporated.

Last year the society held a public exhibition of cacti, and from the interest and encouragement there shown, the members of the Society became convinced that this class of plants was more largely grown than they had any idea of, and that others outside of our members were trying to learn more about the culture of this odd and curious class of plants.

With a view of trying to impart some knowledge to others, it has been decided to publish a monthly Journal, devoted to timely articles on the cultivation of cactaceous plants.

There are but few things in life that have a more refining and ennobling influence upon the human mind than the love and care of flowers.

Plants and flowers are companions and civilizers.

All the great poets have been flower lovers, and many of the best and tenderest natures find comfort and solace from these most precious gifts of the great Creator.

The growing popularity of this class of plants is as much a mark of the world's advancement, as the increase in the number of good books now published, or the higher standard of intelligence as shown by all civilized nations We shall use every endeavour to make the JOURNAL useful and instructive to all our readers.

Among our members and correspondents are several prominent growers of this class of plants and Floriculturists, with whom cacti is a "hobby" whose writings will interest all, and especially those who have a collection of succulent plants.

The price of subscription is as low as we can make it, to publish the paper without a loss to ourselves.

We have nothing to sell but this paper, and no interest to serve other than the good of our members and subscribers.

On these grounds we ask the support of those who wish to know more and better how to care for the plants they have, and how to raise new ones, which kinds are the best for given conditions and surroundings, and the varieties best suited for general cultivation, etc., etc, and we think we can save you more than the cost of a year's subscription, and enable you to spend your money for plants in such a way as to get more satisfaction and enjoyment than ever before.

THE COMING HOBBY.

A great writer and thinker and observer of human affairs said: "Everybody should have a hobby, because it individualizes one." It is not necessary that the hobby should be expensive, and it is desirable to have it one which the ordinary mind can appreciate, for next to the hobby itself is the joy of talking about it to others or getting some friend to share in it for a time. The stamp collector, the youth who impales ugly bugs on pins or the person who spends half a day hammering a longnamed fossil out of a hard rock may thoroughly enjoy themselves, but their hobby is in many respects selfish, since no outsider can enter at once into its pleasures. And if these people begin to ride their hobby in public, their friends either go to sleep or the encyclopædia. The study of the wild flowers and the culture and collecting of the rare and beautiful Cacti are a downright sensible hobby. Especially that of the cacti is the coming hobby and the same is gaining day by day. If ever Americans could feel proud of leading in a hobby, they will feel it has been a great honor to lead in the cacti procession.

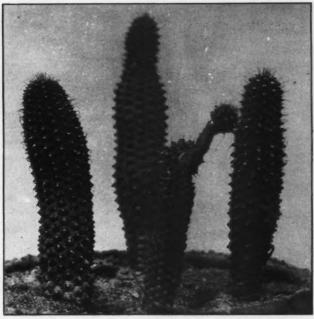


Fig. 79

Trichocaulon somaliense Guillaumin, This photo appeared in the Bulletin of the Belgian Cactus Society "Cactus" ix, p. 20, 1939.

Discovery and Disappearance of a New TRICHOCAULON

Among the new Stapeliads, published since the compilation of THE STAPELIEAE, is a curious *Trichocaulon* (*T. somaliense* Guillaum.), discovered in 1938 in French Somaliland by Aubert de la Rue. It was described by Professor A. Guillaumin in the Bulletin of the National Museum of Natural History, Paris, vol. x, No. 6, p. 628, 1938.

The plant is said to resemble *T. columnare* Nel, by reason of its stem-tubercles ending in stout conical teeth, by its corona being set within the small tube of the corolla, and by the lobes of the outer corona being bifid, giving the outer corona a minutely 10-lobed pattern. The plant differs in being normally 12 to 15-angled, while *T. columnare* is usually 8-angled—in both the angles merge to a smaller number near the base; it differs also in having sessile flowers, the corolla is glabrous, except for a few papillose hairs near the margin, and the outer coronalobes are subulate.

T. somaliense is the first Stapeliad of any genus reported from French Somaliland. This

is a small colony, yet other members of the tribe are so plentiful in Eritrea to the north, Ethiopia to the west and south, and British Somaliland to the south-east, that one would have expected other species to occur there freely. The precise habitat of the new Trichocaulon is not stated, but it is extraordinary to find that it must be at least 2,000 miles from that of T. columnare in South West Africa, and virtually as far from all other recorded localities of this genus, save for one species on the botanically unrelated island of Madagascar.* The type plant of T. somaliense was one of many victims among the rare plants of the Paris Museum in the winter of 1945, when lack of adequate heating in the museum was responsible for the deaths of all but the more hardy specimens. Our photograph shows the type specimen, unfortunately not in Boyd L. Sloane flower.

*There exists of course a possibility, however remote, that the specimen brought to Paris by de la Rue was a cultivated plant introduced to French Somaliland from much further south.

Alain White



Fig. 80 Fully opened flower at 7:30 a.m.

Observations on the Orchid Cactus "Eden"

By EDWARD C. ROOSEN-RUNGE, M.D.

The hybrid "Eden" is a creation of the late Dr. Poindexter. It is one of the best known American hybrids and its rather large, magnolialike flowers are to be found in most collections. One of the parent plants is, without any doubt, Epiphyllum crenatum, as is indicated by the flower as well as by the shape and growth of the joints. However, the hybrid is different from the parent in that it has longer and slightly wider petals, a shorter tube, a more funnel-shaped flower and thicker and stronger joints. It tends to bloom from the extreme tips of the joints which is not the rule with E. crenatum. The fact that the tube is shorter than the limb of the flower, makes it probable that the other

parent was not an Epiphyllum. The complete absence of bristles on ovaries and areoles is against an admixture of Selenicereus. Hylocereus may be involved, or "Eden" may be the result of a chance crossing with some other hybrid plant.

When a specimen of this variety began to develop buds in late February, I decided to observe and record their progress carefully. There are a number of reasons why a series of measurements might be of interest. With their help one might, for instance, be able to predict with fair accuracy the day of blooming. This has its advantages in connection with invitations to friends who might want to see the flowers, but

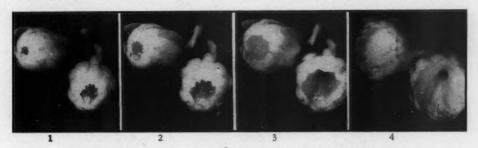


Fig. 81
Unfolding of an Orchid Cactus flower. Photographed at 7:40 p. m., 8:10 p. m., 9 p. m., and 10:15 p. m. The flower was fully expanded by the next morning (see Fig. 80).

it is even more important for the planning of cross pollinations in a small collection. And, topping all other reasons, it might satisfy the curiosity to learn as much as possible about the growth of plants. I have taken a great number of measurements on many different hybrids and species, with which this article is not concerned. I can say from experience, therefore, that the growth of the buds of "Eden" shows the typical features of the growth of buds in any of the Epiphyllanae. Naturally, some species grow faster, others more slowly, but the general shape of the curve of growth as presented here, is amazingly similar in all kinds. In one and the same hybrid the different buds, even on different plants, should show almost identical curves, although minor variations must be expected from changes in the environment, particularly in temperature. These changes, however, play a small part because the accuracy of my measurements was not extreme. The measurements were made with a small carpenter's gauge and with a measuring tape which, because of its unreliability, was always checked against a steel ruler. The flexible tape was necessary because the tubes curved considerably during development. With these simple devices, measurements were made to a thirty-second of an inch, but I feel that errors of one-sixteenth in either direction are easily possible. The plants grew in the livingroom, usually in the lower range of ordinary room temperature. With higher temperature and under greenhouse conditions faster development could be expected.

The two buds which I want to discuss were twins. They must have started exactly at the same time, under the same stimulus. They developed at the same pace throughout, opened within the same hour (see pictures) and were more alike than two eggs. It should be mentioned, however, that one had 11 stigma lobes, while the other had 10. The buds grew out of

two neighboring areoles at the tip of the largest branch. Around the 20th of February they were clearly visible but measurements were not started before March 18. Even at that time the tube was not well demarcated from the corolla and could not be measured separately. When the tube became clearly outlined a week later, it took up only a very small part of the bud, the relationship of limb to tube and ovary being about 21/2 to 1. This proportion quickly changed because the tube grew at a much faster rate than the limb, until on April 3, after only 9 days, it had become slightly longer than the petals. From then on, the limb began to grow much faster, even faster than the tube, although this also gained somewhat in speed. The result was, that at the very end of the development the limb was again longer than the tube and ovary together, at a proportion of about 1.2 to 1.

Anyone who has observed a cactus bud, knows that the bud seems to grow faster and faster as time goes on. This impression appears to be confirmed by the graph, which curves more and more upward, with a particularly distinct break about 12 days before the opening of the flowers. This break occurs in all growth curves which I have constructed so far, although not always at the same time before flowering. It is due to an increased growth of the petals. The impression is correct that the buds increase faster in absolute size toward the end of their development, but this does not mean that the actual speed of growth increases. In the opposite, the speed of growth decreases steadily throughout development. This is a statement which will surprise most readers who are not familiar with the reading of growth curves, and it will require a brief explanation.

If we study the graph more closely, we can read from it that the bud was about 7/16" long on March 18. After that it doubled its length in 4½ days, reaching \(^7/8\)" on March 22. The

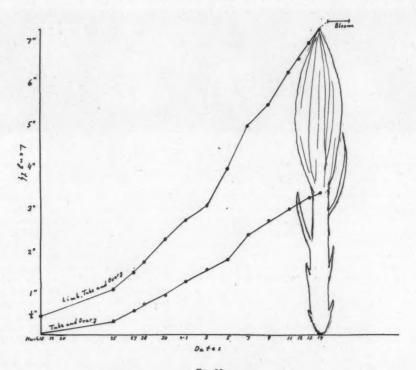


Fig. 82

Graph, showing the last four weeks of growth of the buds of the Orchid Cactus "Eden." The upper curve represents the growth length of the whole bud. The lower curve shows the growth in length of tube and ovary only. Scale is ½ antural size.

next doubling of length took 51/2 days until March 28, when the bud reached the size of 13/4". This length was doubled after 7 days, when the length had become 31/2", and this was once more doubled after little more than 9 days, when the buds measured 7". In other words, it took the buds a much shorter time to double their size in early development than it did in later stages. This, of course, is one of the most general laws of growth, a law which can be studied in animals and plants alike. Growth is the result of the multiplication of cells by division and of an increase in the mass of cells, caused largely by an intake of water. If the speed of growth were maintained steadily, then it should take one hundred cells the same time to double their mass as it would one thousand cells to do the same. Actually the speed of cell multiplication slackens as development goes on, and the intake of water, although it may become great just before the flower unfolds, cannot balance the loss of this factor.

On April 14, during the day, the buds began to swell, indicating that they would open that night and that the labor of measurements was ended. A period of pure enjoyment of the beautiful flowers in all their stages of opening and unfolding followed. The pictures show this phase of the history of the twin flowers better than words could do. It remains to be pointed out that even one single plant offers opportunities for study as well as for pleasure. There are hundreds of facts in plant life about which we know little, and it should be a stimulus to the amateur to know that he may contribute in a small way to the progress of our knowledge, by keeping his eyes open and by recording carefully whatever facts he observes in the life of his plants.



Aug. 1. I never cease to admire the numberless species of the genus Euphorbia. Have specimens from India, Africa, Arabia, and the Canary Islands. Disease resistant and bugless at least in my greenhouse and outside beds. Keep mine about the same position year after year: "columnar" in northwest bench—they get winter sunlight with shade after 1:30 P.M. during summer; "bushy" southeast near glass with shade most of the day but good light; "leafy" on east bench, morning sun and strong afternoon reflected light. Largest plant of my 45 species, subspecies and horticultural varieties is four feet high. Smallest: E. Frickiana (see Fig. 565, page 554, Vol. II "The Succulent Euphorbieae" by White, Dyer and Sloane) one inch in diameter with five small heads.

Aug. 3. Leaves lush on Synedenium Grantii, Monadenium Lugardae, Euphorbia: Barhardtii, Royleana, caducifolia, nivula, neriifolio, Hermentiana, bulbalina and abyssinica. They lose their leaves if not watered regularly. Deciduous in winter for me. Reduce water to once a week. Keep roots from drying out in smaller pots. Cold damp soil in winter is not good either.

Aug. 5. Mixed batch of soil—half pulverized clay and half thoroughly decayed straw or leafmold, one part (to 4 of above) coarse sand or gravel size of wheat grains. To each peck of soil, add 3-inch pot of bonemeal and agricultural lime. Broke small pots and removed ball of soil on Euphorbia lactea cuttings. Potted in 4-inch pots. Gross feeders. Need larger pots than same size cacti. Checked drainage holes of Euphorbias for stoppages and protruding roots. No ants. They give Euphorbias a wide berth. Root aphids, mealy bugs, etc., scarcely ever found. No bugs! No Ants! Paradise?

Aug. 8. Euphorbia splendens finished profuse blooming period. Few blood-red blooms at end of branches. Prefer my plants decorative—treelike instead of wound about wire frame. (Crown of Thorns design). Description and drawings of E. splendens first brought back to Europe in 1583-1595 from Madagascar. Therefore evidently "Crown of Thorns" more fanciful than of religious significance. Keep the longer stems clipped back so they branch. Artistic. Tree-like. Root cuttings and give to young collectors. Seedlings easily grown. Look like "snow-on-the-mountain," our annual hardy Euphorbia in the garden (often a pest hereabouts).

Aug. 10. E. abyssinica (Succulents for the Amateur, fig. 234, page 141) now one foot high. Growing in 6-inch pot of prepared soil. Has grown 10 inches in 2 years, E. antiquorum from India once a source of "Euphorbium," a gum, is growing. Let plant get too dry. Saved side arm. Rooted after 6 months of almost dry treatment. Strange old plant died from being too dry (?) while cutting rooted and started growth under same treatment. E. bulbalina in bloom. Has long bloom stalks develop from top leaf axils. "Petals" green turning to orangy green. Seed develops in three sectioned capsule. Inflorescence yellow. Leaves long. Stem has overlapping scale effect. Decorative. Mine—seedling one foot high. Easily grown

from seed, E. clava with its leaf scars running around in spirals with pineapple-like design has long narrow leaves. Branches freely. Fine pot plant for many years.

Aug. 14. Euphorbia canariensis bought in 1933 when 2 inch red-green seedling. One of the first Euphorbias in my collection called "Hercules Club" then. Now 2 feet tall. Keep it "pot bound." No branches. E. tirucalli which outgrows even the largest greenhouse kept within bounds by top pruning. I have two which bloom. Supply of cuttings limitless. Pupils like them, too. Go to Cleveland City greenhouses when I wish to see what mine might be—15 feet high and 3 feet in diameter at top. Like them small and not so common.

Aug. 18. E. caput-medusae now has 15 arms from central head. Seems to like the prepared soil. Put out 6 arms this season. E. Bergeri thought to be a garden hybrid, grown from an arm. Beheaded after rooting. From base came present plant which is a head putting out its own arms. Doesn't always happen I find, but I got one from 3 rooted cuttings. E. cereiformis has 15 ribs (may be 9 to 15 according to books). Single stem (may be multibranched also). Now 2½ feet high. Dark green. "Blooms" reddish-purple-brown. Spines modified sterile bloom stalks which turn from reddish-brown to gray. Appear on mine along old stalk about every 4 inches with new one forming on top.

Aug, 21. E. Hermentiana much branching lighter green. "Branching tree effect" up stalk. Growing. Has leaves. Three seedlings I bought, now 15, 9, and 6 inches tall and 3 years old. Sunburn easily as ribs are rather thin. Keep high-noon sun off them and away from glass in winter. Euphorbia polygona—6 inches, has 10 offsets at ground level (Fig. 230, Succulents for the Amateur). E. heptagona through blooming. No fruit. Unisexual. E. Ledienii had 15 fruits which gave me 10 seeds. So far no large plants but they're up. E. coerulescens living up to its name. New growth has blue bloom. Low growing plant with many heads. Decorative but outgrows window sill quickly. E. pseudocactus, the "zebra" of the species, grows into a good specimen plant in two to three years from cutting.

Aug. 25. Euphorbia lactea 3 feet tall, repotted last year, is beginning to show new growth. Common in most collections. My cristate, a 4-inch fan, is slowly unfolding along the axis of growth. Water mine more frequently than normal type. Normal top branch from old plant also crested. E. globosa for me has 4 new heads after blooming for two months last spring. Round "marble-like" forms which in one plant I owned grew like beads connected with a cord. E. grandicornis has been hybridized so often in recent years I doubt if the ones being sold now are the species. I recommend cuttings from an adult plant. Mine has three stems from 1 to 4 feet high. Grows stringy unless in good soil, Strong light but not noon sunlight. Liberal water during growth.

Aug. 27. Often wonder what happened to wash tub of E. Mammillaris owned by the late Henry Poth, Mansfield, Ohio. Had 50 to 75 heads from original stalk. Mine has 10 at present but not all growing now. E. meloformis, valida, obesa and Susannae all growing. Globose, unisexual, single head outside of E. Susannae. Has 4 leaves. All small at present Interesting patterns from green checked calico (obesa) to herringbone (valida).

Aug. 31. E. submammillaris (Pfersdorfi) bushy, green, many headed charmer through putting out new

heads. Has 50 to 60 large and arresting off-the-stembranches. E. fimbriata in my collection is a much branched giant size of E. submammillaris, Checked all 41 species and found them ready for late summer and fall growth, rest or what have you. Culture of all the same. Good soil. Excellent drainage. Strong light avoiding noon time sunlight as much as possible during summer months. Cool 45° to 55° night temperature during winter. Store cool but never without good light as they are children of the veldt, where they grow under shrubbery, etc. E. splendens likes a warmer location or it doesn't bloom profusely. E. mauritanica is a branching reed type with small leaves on the newer growth. Good window plant. E. officinarum has 9 ribs. One of the earliest classified by Linnaeus. Source of "gum" used in early medicine.

Euphorbias? Yes sir. I like them but I'm sorry to say I am first and foremost a cactophile and take this means of apologizing for this hodge-podge to our "Euphorbiaphile" G. A. Frick, Cleveland, Ohio born, now a Californian and leader in the Euphorbia cult.

AFFILIATE NOTES

Please mail your Affiliate Notes to Box 101, Pasadena, California.

Two years ago the beautiful Yucca Whipplei in their full glory welcomed us to our new home among them. Today, standing stripped of their bridal garments they bid us a fond farewell as we set forth on our long journey in pursuit of that elusive thing called health. Your President, Mrs. Place, and myself wish to thank the many friends we have encountered through the correspondence of this column, and who have helped us so materially in making the column possible, and we advance the thought, that as we roll along, taking full advantage of our leave of absence, we may be able to contact some of you and thank you personally.

Mr. C. L. Wiese (Pub. Chr.) writes:

'For the Cactus and Succulent Society of Oklahoma, the delightful summer evenings contribute much to make lawn parties pleasant club events from June until September. This affords opportunities to share views with fellow members and observe their methods and measure of success in caring for their collections of plants. We met June 20th on the lawn of Mr. and Mrs. Wiese, where informality in landscape artistry is paramount and where every twist and turn presents new surprises in scenic effects pleasing to the eyes. Looking around is usually sufficient entertainment on such occasions. Mrs. Winnie E. Jones gave an interesting lesson on the Versatility of Cacti. After adjournment we played games in the clubroom while refreshments were served. Delightful-did you say? Drop in and meet with us sometime."

Mrs. Ella Nipper (Pres.) writes:
"The Amateur Cactus Society of Chester, Illinois, held their June meeting at the Coles Memorial Library. After the regular business meeting, Miss Norma Berry read the Affiliate Notes from the May issue of the Cactus and Succulent Journal also 'A Floral Romance' by C. L. Wiese. At this meeting we had our first sale, (a white elephant sale), which netted the Club's treasury \$12,20. Seven members were present and four visitors; two new members were added to our Club, Mrs. Ann McBreaty and Mrs. Verna Poenitske. We now have fifteen members. At the July meeting an auction sale of cacti was held; the plants were donated Mrs. E. L. Obenchain, of Cedar Vale, Kansas. Eddie Hood, our 11 year old visitor from McLeansboro, Ill., was the auctioneer and how he ever spoke the correct names of all those cacti was a surprise to us all. With the proceeds from this sale we now have \$30.00 in our treasury. Thanks, Sadie for the cacti; our members have several nice plants added to their collections, also. Mrs. Walter Decker donated the door prize, a beautiful Kalanchoe tomentosa planted in a pretty new pot. Walter Edward Decker was also a visitor at this meeting,"

Natural sequence, many visitors make new members.

Mr. E. Worthington (Pres.) writes:

"The Amateur Cactus and Succulent Society of British Columbia devoted the May meeting to the preparations for the third Parlor Show, to be held at the June meeting. Messrs. J. Davidson and G. Edwards were put in charge of arranging the tables, etc. Mr. S. Oliver, editor of Garden Beautiful, made the suggestion that the Club admit country members. These members would pay the usual dues, (\$1,00 per annum), could attend meetings and vote when in town and at other times lay their problems or tell us of their successes by mail. The suggestion was adopted and Miss E. Worthington was appointed Country Secretary. Following the business meeting a plant auction was held with the President as auctioneer. This was the first in which the club took 10 percent of the amount realized, the balance going to the member bringing the plants. There was quite brisk bidding for most of the lots and everybody went home quite happy with something new. In addition to Mr. Oliver and his wife and friend there were four other visitors and all members considered it one of the best meetings yet, At the June meeting, business was reduced to a minimum but even so we had to wait a short while for the judges, Messrs. H. Moth and L. Clay to finish their work. During the waiting period Miss A. Gilbert read a Journal article to us which we all enjoyed. The Country Secretary reported one out of town inquiry up to the present, but that is a start and we look forward to more in the future. Finally the judges were finished and after they each had said a few words of praise of the plants shown, the meeting scattered to the There were 85 plants entered in 14 classes by 8 exhibitors. The number of exhibitions was too low with the result that the greater number of points went to two people, joint owners of a collection, Mr. and Miss Worthington. We sincerely hope that at the next show we have more people showing and a more equable distribution of points. From the Cactus Digest, Lad Cutak, Editor, of the

Henry Shaw Cactus Club: "It was a jolly and happy group of cactus lovers that met in the Museum Building. Mr. Blandford, our President, turned the meeting over to Mrs. A. Frank, who conducted the meeting. Sally Williams, Chairman of the Spring Cactus Show, gave all the members and committees her thanks for a grand co-operation. She said when the awards were chosen they tried to keep in mind the personalities and also tried to pick plant prizes for the winners which they did not possess. In this she succeeded very well and all winners were thrilled when their names were called. B. Helmer handed out the prizes and a grand round of applause was given to Mrs. Frank when she was presented with

the grand Sweepstake award."

From the Heart of America Cactus Club bulletin, Jack Womack, Editor:

"The June meeting was held at the home of L. H. Rose. Meeting called to order by our president Robert Rose. Members discussed having 35mm slides made of their collections. Mrs. New was the first one to be June 16th. A talk was given by Mr. Pickering on the Winter Care of Succulents."



California held many surprises for me. Prior to my departure I had made a few preparations, one of which was a list of places to visit, folks to meet and work to be done. When friends heard of my coming they, too, began formulating plans to make my stay as interesting and enjoyable as possible. Consequently, I did lot more things besides accomplishing everything that was

expected of me through this visit.

One of the many enjoyable surprises was a visit to a unique garden in Inglweood. It was developed by two young bachelors—a partnership as unique as the garden itself. From the street there is nothing unusual about the modest home located at 226 East Fairview Boulevard. It is true that the neatly trimmed lawn and judicious planting of shrubs, vines and flowering plants suggested the abode of plant lovers, but then this is characteristic of many California homes. Entering the back yard by way of a side gate, one is im-mediately ushered into a veritable jungle of Epiphyllum plants, towering from espaliered pots or hanging from suspended baskets. The whole yard is practically converted into a lathhouse with several levels descending to the end of the property. Every available corner, nook or bench is crowded with healthy, vigorous growth of Epiphyllums. All, except the basket type, are trained on espaliers set in various kinds of containers. This method permits the owners to cultivate a maximum amount of plants in an otherwise cramped space without decreasing light and air requirements which these plants demand. Something in the vicinity of 250 varieties are grown and there are approximately 750 blooming-sized hybrids producing hundreds of flowers each year. At the time of my visit the exquisiteflowered Carmencita was in its glory, loaded with bright scarlet blooms. No matter where I looked its Distinct also was Rosetta, bearing flowers of the loveliest pink magenta. Other Orchid Cacti were heavily budded, waiting for their debut a few weeks hence

I doubt whether many of our readers know about this private garden in Inglewood, where visitors are always welcome. Much can be gained about the cul-ture of Orchid Cacti even from a single visit to the "Country Garden" as it is called by its owners. Professional growers have given it a high rating. Asked about the secret of their success with Epiphyllum hybrids, both believe in giving their plants the partial shade they require and a logical soil mixture of leafmold, manure, decomposed granite and sandy loam in equal parts, plus regular watering and periodic con-ditioning, such as tying up to prevent breakage and continuous vigilence against snails. Otherwise both modestly assert that there is no secret to the growing and that if they were extremely difficult then they would probably not succeed.

The incentive to grow Epiphyllums sprung from a rather sentimental motive. You see, Paul L. Fort fell in love with a sweet Italian girl from Colorado but apparently he was too slow in proposing marriage, so she meets up with his best pal, a budding physicist, and marries him. The girl loved flowers and at one time she brought to the Fort home a slip of Epiphyllum Ackermannii, which was duly rooted and planted. For ten years it was literally abused due to moving

about and then suddenly one spring (1937) it blossomed profusely. The gorgeous blossoms captivated Paul and he decided to investigate the plant group to which it belonged. In doing so he found out that there were many other exquisite colors to be had. He bought a few here and there and thus started the famous collection. Junie, the Italian lass, died in 1926 and since she meant more to him than he at first realized, he never married. Mr. Fort likes to imagine that Junie's cutting was the basis of his interest in Orchid

Cacti

Paul's father also died in 1926 and he was left alone with his mother. Having room in the house they took in boarders. When one of the boys left for Germany an ad was placed in the local newspaper which was answered by William G. O'Barr, who has remained ever since. That was in 1929. This young lad had fled the ranch of his dad in Arizona when he thought he could no longer endure another season of cotton growing. Bill and Paul got along very well from the start. When an opportunity presented itself, Fort got a job for O'Barr at the factory where he became got a job for O bair at the factory where he became a document clerk. For eleven years the two men worked for the same company and then O'Barr branched out into greener fields. He's done very well and at the present is with the Los Angeles Chamber of Commerce as Secretary of the Rail and Highway Division, Transportation Department.

Both Fort and O'Barr are very sociable fellows and take pride in showing their plants to interested folks. After the daily toil is over, these two confirmed bachelors head for the patio and garden and there find enjoyment among their mute Epiphyllums. Perhaps it is best that they are bachelors, for if otherwise their garden might be filled with weeds.

Did you know that there is a small nocturnal saurian, Xanthusia vigilis, which prefers to live in regions where groves of Joshua Trees occur? larly known as the Yucca Night Lizard, the adult male measures less than three inches while the female is slightly larger. According to Dr. Edmond Jaeger, this little lizard is entirely dependent upon the Joshua tree and could not survive without it. This small saurian lives under the bark and in cavities of rotting, decumbent trunks where it subsists largely on termites, ants, and insect larvae. Infrequently it will be found under the dead leaf rosettes of Yucca Whipplei. Nolina Parryi and Agave deserti.

Nolina interrata is a new species recently described from Southern California by Howard Scott Gentry in the April issue of Madroña (8:179-184). This new xerophytic lily is said to resemble *Nolina Palmeri* in its foliage, but it differs from that species in its larger fruits, which do not dehisce to expose a persistent seed. According to Mr. Gentry, it appears most closely related to the N. Beldingii group, from which it is distinguished by its more glaucous, narrower leaves with more numerous marginal teeth of two sizes, with open denticulate intercostal sinuses and by the larger seeds. The horizontal subterranean trunk or rhizome is especially noteworthy and would have been overlooked had not erosion exposed portions of the rhizome.

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